# NOTES ON THE RHYNCHOPHORA OF EASTERN NORTH AMERICA WITH DESCRIPTIONS OF NEW SPECIES, IV

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This is the fourth<sup>1</sup> of a series of articles supplementary to the "Rhynchophora of Northeastern America." That work, prepared by Chas. W. Leng and myself, was issued in 1916. During the three years which have elapsed since the third of these supplements was prepared I have collected extensively in Indiana and the southern half of Florida, especially at Royal Palm Park, a tract of 4,000 acres as yet practically unmarred by civilization, which lies in the extreme southeastern corner of the State. This park includes Paradise Key, an island in the everglades, covered by a dense hammock of 400 acres in which grow many tropical and subtropical trees and shrubs, among them eighty or more indigenous examples of the royal palm, Oreodoxa regia, H. B. K., the most magnificent endogen of the western continent, their tufted crowns rising seventy-five or more feet above the tops of the great live oaks and other hard-wood trees of the hammock. Four visits, of two to four weeks each, have been made to the park, and in this hammock, the everglades surrounding it and the adjacent forests of Caribbean pines, all within the limits of the park, I have taken, in March, April and December, 645 species of Coleoptera, exclusive of the Staphylinidae and Scydmaenidae, which have not yet been mounted or studied. Many of these are tropical or subtropical forms, not known elsewhere, except in southern Florida, from the United States, and quite a number have proven new to science. In the park and about Dunedin, on the west coast of Florida, where I have my winter

<sup>1</sup> The other three were published in this JOURNAL, Vol. XXVIII, 1920, pp. 161-178; Vol. XXX, 1922, pp. 95-106, 113-127, and Vol. XXXIII, 1925, pp. 87-113.

home, I have in recent years also found numerous examples of weevils, whose main distribution is much farther northward, and which here reach the southern limits of their range.

In the "Rhynchopora" but few definite station records for the weevils of Florida were given as, up to 1916, but few had been recorded. Many of the older coleopterists, including both Leconte and Horn, were content to put "Fla." or "Florida," after their descriptions, not taking into consideration the fact that the State is approximately 400 miles long, 360 miles across its northern border, and contains an area of 60,000 square miles. Representatives of three distinct faunas, the Austroriparian, Subtropical and Tropical, live within its bounds, and the time has come when more definite and accurate distributional notes than those furnished by the mere name of the State, are needed for the use of future students.

In addition to those species of weevils collected personally, since the third supplement was prepared, I have received many for naming. A number of interesting records have also been published by other writers. Where these extend appreciably the range of any species treated in the Rhynchophora, they are included in the notes which follow. New species which have been described in the last three years, and new introduced forms which have been discovered and recorded are also mentioned, with a brief diagnosis of each where the data was available. It is hoped that in the notes and records thus given in this series of articles, our knowledge of this interesting group of beetles may be kept somewhat up to date, and in permanent form for use in future years.

The numbers before the majority of the species mentioned are the serial numbers of the same species in the "Rhynchophora." Where no number is given the species was not included in that work. The nomenclature, where different from that of the "Rhynchophora" is that of Leng's "Catalogue of the Coleoptera of America North of Mexico," or of monographs of certain groups which have appeared since that "Catalogue" was published. In most instances where a generic name now in use differs from the one used for the same or allied species in the "Rhynchophora," the old name in parenthesis follows the new. Unless otherwise stated, the types of the new species described are in my personal collection.

### 6. Ormiscus saltator Lec.

Additional station records for this little weevil are Sherborn, Mass., June 19 (Frost); Marion Co., Ind., June 9–July 7 (W. S. B.).

#### 16. Tropideres rectus Lec.

Taken in numbers in March and April in the dense hammock on Paradise Key, Royal Palm Park, Fla., by beating bunches of dead leaves and dead branches. Taken also at Chokoloskee, Fla., in March.

#### 22. Anthribus cornutus Say.

Additional Florida stations are Gainesville, Everglade, Cape Sable and Royal Palm Park, February-April. Occurs most commonly in dense moist hammocks.

## 28. BRACHYTARSUS STICTICUS Boh.

Common throughout southern Florida, where it is smaller than in the north and exceedingly variable in marking. The thorax in some examples has the basal two-thirds or more a solid fuscous-black, in others only a few small scattered dark spots are present. The dark spots at base of elytra are often enlarged and merge to form a bar, while those behind middle are sometimes wanting, sometimes merged to form a common sutural blotch.

### 29. BRACHYTARSUS TOMENTOSUS (Say).

Only two examples have been taken in Florida in 16 years collecting, one at Dunedin, the other at Royal Palm Park, both in April by sweeping herbage in low cultivated grounds. In recent years it has been found in numbers, June-August, in Marion, Putnam and Crawford counties, Ind.

### 33. Anthribulus rotundatus Lec.

This is the most common Anthribid throughout southern Florida, occurring by hundreds on the vegetation of low moist meadows, December-April.

## 41. EUXENUS PICEUS Lec.

This is evidently a submaritime species. Several have been taken at Dunedin, December and February, while beating on Hog Island and on the mainland along the bay front.

#### ----. Euxenus ater new species.

Rounded-oval, strongly convex. Black, rather strongly shining; head, legs and antennæ dark reddish-brown; basal joint of antennæ and extreme tip of beak dull yellow. Head deeply immersed in thorax, its front flat, minutely and sparsely punctate; antennæ set in deep rounded sockets exactly between middle of eyes, their segments as in other members of the genus. Thorax, including the strongly deflexed flanks, nearly twice as broad as long, front margin truncate, broadly curved, hind one feebly sinuate; disk strongly convex, finely, densely and deeply punctate. Elytra at middle one-third wider than middle of thorax, conjointly two-thirds longer than wide, disk convex, with distinct punctures arranged in irregular double or treble rows, separated by interrupted smooth lines. Length .8 mm.

Dunedin, Fla., December 20. One specimen beaten from dead branches in a dense hammock. Evidently more closely related to *punctatus* than *piceus*, but smaller, with dark legs and with both thorax and elytra more densely punctate. It has been compared for me with Leconte's type of *punctatus* by Mr. Banks.

## 47. AULETES ALBOVESTITA Blatch.

The principal food plant of this weevil is apparently the sweet fern, *Comptonia peregrina* L., as Frost sent me three specimens taken from it at Sherborn, Mass., May 3, 1925, and 98 from the same plant September 6. He also reports it as common on the same plant in New Brunswick and Nova Scotia.

#### 117. Apion umboniferum Fall.

Two specimens of this large, coarsely pubescent, reddish-brown Apionid were beaten, February 23, from *Viburnum* near Gainesville, Florida. It was described from Maryland and had not been recorded elsewhere. In the Rhynchophora it was stated that it was "probably only a variety of *puritanum* Fall, but a direct comparison of the two forms now at hand shows that they are very distinct.

H. C. Fall has described<sup>2</sup> three new species of eastern *Apion* since my last supplement was issued. They all belong to Group I, p. 67, of the "Rhynchophora."

----. Apion dilaticolle Fall.

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A wholly black species, 2.3 mm. in length, closely allied to *A. pennsylvanicum* but "differing by its larger thorax, more evenly oval elytra, coarsely punctured ventral surface and close striation of the femoral swelling in male." Known from Montclair, Ramsey and Oradell, New Jersey.

----. Apion bischoffi Fall.

Also a black species, 2 mm. in length, closely allied to *dilaticolle* but with broad elytra and the hind body shorter and more convex. Described from New Jersey, Staten Island, N. Y., and Virginia. This is, in part, the *A. atripes* Smith, the No. 70 of the Rhynchophora.

——. Apion diffractum Fall.

Black with legs brownish-piceous to brownish-red, length 1.5–2 mm. Allied to *finitimum* Fall, but having the femoral swelling of male densely finely striate on its inner face. Like *finitimum* it has the front tibiae of male strongly widened; these two species differing from all others of Group I of the Rhynchophora in this character. Described from New Jersey, Cambridge, Mass., and Cœur d'Alene, Idaho.

### 132. PANSCOPUS ERINACEUS Say.

L. L. Buchanan has recently published<sup>3</sup> a "Review of Panscopus," with key to all known North American species. He states that these and other ground-inhabiting beetles "form an

<sup>2</sup> Bull. Brook. Entom. Soc., XX, 1925, 85-87.

<sup>3</sup> Proc. Ent. Soc. Wash., XXIX, 1927, 25-36.

important item in the diet of North American toads," and describes six new species from the northwestern states, three of which were taken from the stomachs of toads. In his key he makes P. carinatus Pierce (No. 136 of the Rhynchophora) a synonym of erinaceus Say.

### —. BRACHYRHINUS (OTIORHYNCHUS) LIGNEUS Oliv.

Several examples of this European species have been received from C. A. Frost. They had been sent him by Prof. A. P. Morse, who in turn had received them from Machias, Maine, where they occurred in numbers, crawling on the rooms of a farmhouse. The insect was named for me by Nathan Banks, who compared it with European examples in the Cambridge collection. Superficially it resembles closely<sup>4</sup> B. ovatus (Linn.), but is a paler brown, less shining, with the hind femora unarmed, thorax closely granulate-punctuate, elytral striae more coarsely punctate, intervals more convex, much more rugose, each with a row of rather long inclined setæ. All of the seven species of Brachyrhinus at present known from the territory covered by the Leng Catalogue have either been introduced from Europe or are indigenous to both northeastern America and northern Europe. Banks (Ms.) states that they now have in the Cambridge Museum 140 named European species of the genus.

This new species was described<sup>5</sup> from Skyland, Page Co., Virginia. It is 9 mm. in length, black, "antennæ and legs dull dark brown, coated with minute scales of varying colors. Elytral striæ rather deep, with punctures large, subquadrate." The unique type is in the collection of Alan S. Nicolay.

186. Phytonomus comptus Say.

A single example was taken by sweeping low herbage near Gainesville, Fla., February 21, 1927. Not before recorded from that State.

<sup>4</sup> So closely, in fact, that Horn (1876, 61) described *ovatus* under Oliver's name. The seventh line at the top of p. 112 of the "Rhynchophora" should read: "Horn, nec Oliver, is a synonym."

<sup>5</sup> Proc. Ent. Soc. Wash., XXVII, 1925, 141.

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——. LISTRODERES APICALIS Waterhouse.

This South American weevil, originally described<sup>6</sup> from Monte Video, Uruguay, has been recently taken in numbers on beets and other vegetables at various localities in Louisiana and will probably be found in adjoining states.<sup>7</sup> It is 5–6 mm. in length, thickly clothed above with pale brown scales. The elytra have the third and fifth intervals slightly elevated, and have a postmedian cross-bar of dark brown scales behind which the scales are white or nearly so. The genus *Listroderes* differs from *Listronotus* in being more oblong and depressed and in having "posterior evanescent scrobes." The thorax is much widened in front of middle, and with apical third much flattened.

### 198. LISTRONOTUS CALLOSUS Lec.

Two females, each 13. mm. in length, were taken December 12, hibernating amidst the roots of a large tuft of roadside grass at Royal Palm Park. This is the first record from Florida.

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This new species, described<sup>s</sup> from Ithaca, N. Y., Washington, D. C., and Ohio, is closely related to *L. appendiculatus*, but is smaller, 4.5-5.2 mm., and both thorax and elytra have a wide lateral stripe of dense yellowish-gray scales, the apical third of elytra also with variegated brown and yellow scales. The female has the elytra produced in minute short, acute points and the fifth ventral transversely concave at base.

#### 199. LISTRONOTUS INAEQUALIPENNIS (Boh.).

One taken at Royal Palm Park, December 15, from beneath a board in the everglade marsh; two, April 5, by sifting weed debris on side of ditch. Also the first definite record from Florida.

<sup>8</sup> Journ. N. Y. Ent. Soc., XXXIV, 1926, 341.

<sup>&</sup>lt;sup>6</sup> Proc. Zool. Soc. London, 1841, p. 123.

<sup>&</sup>lt;sup>7</sup> See Chittenden, Proc. Biol. Soc. Wash., XXXIX, 1926, 71-74.

207. LISTRONOTUS FLORIDENSIS Blatch.

This has proved to be a common species throughout southern Florida, scores having been taken at Royal Palm Park in April on flowers of arrow-head along the margins of the everglades.

### 215. Hyperodes solutus (Boh.).

The first known Florida specimen of this well marked species was taken at Royal Palm Park April 4 on flowers of arrow-head. Not before recorded south of the District of Columbia and Kansas.

——. Hyperodes annulipes Blatch.

A third example of this recently described<sup>9</sup> weevil was taken at Dunedin, Fla., December 15, while sifting grass roots from the margin of a pond. The tibiæ, as well as the tarsi, are reddishbrown.

227. Hyperodes sparsus (Say).

This common northern species has recently been found in some numbers at Dunedin, Fla., where it was swept from herbage along the margins of ditches in April. It has not before been definitely recorded south of Missouri.

231. Hyperodes novellus Blatch.

One sifted from weed debris on the side of a ditch, April 7, at Royal Palm Park, Fla. Described from Dunedin and Sarasota, that State, and not recorded elsewhere.

### -----. Hyperodes carinatus new species.

Elongate, subcylindrical. Color a nearly uniform reddish-brown, rather strongly shining, above thinly clothed with rather large dirty white scales, these aggregated to form an irregular patch on sides of thorax, and on elytra forming numerous small spots, arranged in narrow more or less wavy cross lines. Elytra each with a small vague blackish spot in front of declivity and another on middle of flanks. Beak and head densely punctate, each puncture enclosing a small prostrate yellowish scale; front with a distinct deep median fovea; beak almost as long as thorax, its three carinæ,

<sup>9</sup> Journ. N. Y. Ent. Soc., XXXIII, 1925, 92.

especially the median one, sharp, prominent. Thorax subcylindrical, as long as wide, slightly narrower toward base, disk rather coarsely and densely punctate. Elytra nearly one-half wider at base than thorax, sides straight to apical third, thence obliquely narrowing to apex; disk with all the intervals narrow, sharply carinate, each with a row of very short, almost invisible inclined setæ; striæ narrow, deep, closely punctate. Ventrals 1 and 2 coarsely, irregularly, not densely punctate, 3–5 more finely punctate. Apical three-fourths of last ventral of male with a wide shallow median impression. Length 3 mm.

Type, a male sifted, March 31, from weed debris on the side of a roadside limestone ditch at Royal Palm Park, Fla. Belongs to Group III, p. 171, of the "Rhynchophora." One of our smallest known species and differs from all others in the narrow, even, sharp carinæ and the peculiar arrangement of scales of elytra.

#### 257. Derelomus bicolor Lee.

Swept by scores in April from the flowers of the silver palm, *Coccothrinax argentea* (Lodd.) at Royal Palm Park, Fla. With the typical form, which has the thorax black, were 20 or more specimens of another, averaging larger and having the entire upper surface dull yellow, with three vague cross-bars of pale yellow across the elytra, one basal, one median, the third preapical. The only evident structural distinction between the two forms is the almost total absence in the pale one of the preapical cusp on the sides of thorax. This is usually prominent in typical *bicolor*. The latter is much more active in the sweep net and clings tenaciously to the forceps when picked up. This the pale one did not do. It is possible that the pale form represents a distinct color variety, as no intermediate specimens were found. Banks reports a single specimen of the pale form in the Leconte series at Cambridge.

#### 266. Dorytomus vagenotatus Casey.

This species was described from Indiana, and in the Rhynchophora was recorded only from Marshall County, that State. It is now at hand from Starke and Putnam Counties, Ind.; Harrisburg, Pa., June 25 (*Champlain*) and Sherborn, Mass., March 25 (*Frost*). It is probably confused in eastern collections with *D. brevicollis*.

## 270. Dorytomus squamosus Lec.

Marion Co., Ind., June 9; swept from low herbage along the bluffs of White River. Known heretofore in that State only from Lake County, near Lake Michigan.

### ——. NOTARIS BIMACULATUS (Fab.).

L. L. Buchanan has recently issued<sup>10</sup> "A Short Review of Notaris," in which he records this European species from Wisconsin and other northwestern states. It is a black species, 5.5-8.5 mm. in length, with elytral intervals densely granulose and usually with a patch of pale scales behind the middle of the third one. He regards the *N. wyomingensis* Chitt. as a synonym of the Fabrician species.

#### ----. Smicronyx minutissimus new species.

Elongate, subcylindrical. Pale reddish-brown, shining; above thinly but evenly clothed with rather large, oblong, dirty white scales, those on legs, beak and thorax arranged transversely, on elytra in a single row on each interval, with those on sides more irregular. Head nude, convex, very finely alutaceous; beak rather stout, as long as head and thorax, its sculpture concealed. Thorax subcylindrical, as long as wide, sides very feebly curved. Elytra at base one-half wider than thorax, sides straight and parallel to apical fourth, thence gradually curved into the obtusely rounded apex; disk very finely striate, sculpture concealed. Under surface densely clothed with oval silvery-gray scales. Length 1.3 mm.

Type, a male taken at Dunedin, Fla., April 20, 1925, by sweeping herbage growing in rich mucky soil. This is by far the smallest of eastern species of Smicronyx, its size alone easily distinguishing it from all other members of Group II, p. 210 of the Rhynchophora.

#### -----. Tanysphyrus atra new species.

Form and size of *T. lemnæ* (Fabr.). Black, everywhere strongly shining; thorax with a conspicuous patch of oval silvery-white scales each side of

10 Bull. Brooklyn Entom. Soc., XXII, 1927, 36.

middle. Elytra with similar but smaller scales, these forming a narrow sutural stripe, an irregular somewhat broken ring on basal half and covering the greater portion of the declivity; femora and under surface, except middle of meso- and metasterna and first ventral, densely clothed with larger oval similar scales. Beak as long as head and thorax, distinctly longer and more slender than in *lemnæ*, its basal three-fourths coarsely punctured, apical fourth or less almost smooth. Thorax and elytra as in *lemnæ*. Length 1.3 mm.

Described from a single specimen received from C. A. Frost, and now in his collection. It is labelled "Cambridge, Mass., V-24-23, Darlington." The shining black color of entire body and all appendages and the distinctly longer and more slender beak, readily separate it from *lemnæ*, the only previously known species of the genus.

The most important paper on our eastern Rhynchophora which has appeared since 1925 is the "Classification of the Nut Curculios of Boreal America," by Dr. F. H. Chittenden.<sup>11</sup> In it, however, except for one sentence on page 130, he wholly ignores the treatment of these weevils by Leng in the "Rhynchophora." They were formerly known under the generic name *Balaninus* Germar and were so treated by Leng, pp. 261–273 of the "Rhynchophora." This name was shown by Pierce<sup>12</sup> to be an isogenotype of *Curculio* Linn., hence this generic name is used by Chittenden. The changes made by him in the specific names used in the "Rhynchophora," and the new species described by him from the territory covered by that work as as follows,<sup>13</sup> the page numbers cited in the text of this paper being those of the "Rhynchophora."

### 383. Curculio proboscideus Fabr.

The forms *hariolus* and *cylindricollis* Casey (p. 265) are made synonyms of this large chestnut weevil.

<sup>11</sup> Entomologica Americana, VII, N. S., 1927, pp. 129–207, pls. XII–XIX. <sup>12</sup> Proc. Ent. Soc. Wash., XXVII, 1925, 113.

<sup>13</sup> The names of the new eastern species of Dr. Chittenden are preceded by an asterisk. For their distinguishing characters consult his paper, loc. cit. in footnote No. 11. 384. CURCULIO CARYAE (Horn).

This species is retained as treated in the "Rhynchophora" and without synonyms, its host plants, the hickory and pecan, being distinctive.

385. Curculio rectus (Say).

B. cuneatus and sparsellus Csy. (p. 267) are treated as synonyms of rectus by Chittenden.

386. CURCULIO AURIGER (Casey).

This specific name has page priority over algonquinus Casey. The three forms described by Casey, which are mentioned by Leng (p. 268), viz., setosicornis, macilentus and perexilis, as well as four others proposed by Casey, mollis, strigosus, algonquinus and acuminatus, are all made synonyms of auriger by Chittenden.

387. CURCULIO NASICUS (Say).

The *B. auctus* Casey (p. 273) is made a synonym of *nasicus* and the range, as given by Leng, is extended to include Vermont, Wisconsin, Iowa and North Carolina.

\*---. CURCULIO LONGIDENS Chitt., loc. cit., p. 155.

Described as new from numerous localities in the east and south. Food plants, the acorns of various species of oaks.

\*—. CURCULIO MULTIFASCIATUS Chitt., loc. eit., p. 159.

Described from Wingra Lake, near Madison, Wisconsin.

388. CURCULIO PARDALIS (Chitt.).

The *B. virginicus* Casey (p. 270, in part), and the *B. appal-achius* Casey (p. 273), are placed as synonyms of *pardalis*.

\*---. CURCULIO VICTORIENSIS FULVUS Chitt., loc. cit., p. 165.

Described from Georgetown, South Carolina. Reared from acorns of *Quercus virginiana*.

----. CURCULIO STRICTUS (Casey). Ann. N. Y. Acad. Sci., IX, 1897, 660.

This form, described from New Mexico and therefore not mentioned in the "Rhynchophora," is regarded as a valid species by Chittenden, and under it he places as synonyms the *B. longipes*, *virginicus* (in part), *ordinatus*, *utensis* and *tubulatus* of Casey.<sup>14</sup> Its range is given as extending from Pennsylvania and West Virginia west to Utah and New Mexico. He includes specimens taken by me in Putnam County, Ind., and referred to *nasicus* Lec. Reared from acorns of various species of oak.

----. CURCULIO PARVIDENS (Chitt.). Proc. Ent. Soc. Wash., X, 1908, 24.

This form, mentioned on page 272, is retained by its author as a valid species. It occurs in North Carolina, Florida, Mississippi, Alabama and Texas. Reared from acorns of various oaks.

389. CURCULIO CONFUSOR (Ham.).

Retained as treated in the "Rhynchophora" and breeds only on the two species of oaks there mentioned. The known range is extended to Wisconsin, South Dakota and Missouri.

-----. CURCULIO ORTHORHYNCHUS (Chitt.). Proc. Ent. Soc. Wash., X, 1908, 26.

This form, mentioned on p. 267, is retained as a valid species by its author. The range as given extends from New Jersey west and southwest to Wisconsin and Texas. Breeds in acorns.

#### 390. CURCULIO BACULI (Chitt.).

The range of this species is extended to include Quebec, Ontario, Wisconsin, Florida and Texas. The acorns of eight species of oaks are mentioned as host plants. The *B. curtis* Chitt. (p. 271) is placed as a variety.

391. CURCULIO HUMERALIS (Casey).

This form is retained by Chittenden as a valid species. Although Leng (p. 272) states that it occurs in Georgia and Flor-

<sup>14</sup> Can. Ent., XLII, 1910, 123-127.

ida, both Casey and Chittenden state that it is known from a single male from extreme southern Florida.

#### 392. CURCULIO OBTUSUS (Blanch.).

The range of this hazlenut weevil is extended to include Ontario and Manitoba, Canada, Mexico and Guatemala.

\*—. CURCULIO NUMENIUS Chitt., loc. cit., p. 178.

The range as given includes eastern Ontario, Manitoba, Michigan, northern Indiana, Iowa, South Dakota and Colorado. No host plant is mentioned.

\*—. CURCULIO FUNICULARIS Chitt., loc. cit., p. 179.

Described from Toronto, Canada, and Las Vegas, New Mexico. No host plant mentioned.

------ CURCULIO IOWENSIS (Casey), Can. Ent. XLII, 1910, 122.

This form was described from Iowa, and therefore not included in the Rhynchophora. Chittenden gives its range as extending from Rhode Island and New York west to Wisconsin and Kansas and south to North Carolina. Breeds in the acorns of oaks of various species.

\*—. CURCULIO EXILIS Chitt., loc. cit., p. 182.

Described from a unique female taken at Ottawa, Ontario.

In his paper Dr. Chittenden recognizes forty species of these nut weevils from Boreal America, twenty of them from the area covered by the Rhynchophora, as against ten treated by Leng in that work. Judging from my forty-five years' experience in field collecting, I believe that one-fourth or more of the species at present recognized, especially those breeding on oak, will prove to be synonyms or mere varieties. It will be noted that Dr. Chittenden makes no one of his previously described species a synonym and but one of them a variety.

——. Orchestes testaceus Mul.

C. A. Frost informs me that this red European species has been recently taken by him at Paris, Maine, Emo, Ontario, and New

Brunswick, and that A. S. Nicolay has found it in New Jersey. On account of lack of specimens or description, no brief diagnosis can be given.

## 441. ANTHONOMUS UNIFORMIS Blatch.

This weevil is quite common about Dunedin, January to April, on the foliage and fruit pods of a shrubby St. Johnswort, *Hypericum aspalathoides* Willd. Taken also at Gainesville and Royal Palm Park, Florida, on the same plant.

——. ANTHONOMUS BICOROSTRIS Blatch.

Three examples of this recently described species<sup>15</sup> were taken at Dunedin, December 22–March 19, by beating dead branches of elder. At Miami and Royal Palm Park, the type and only other known localities, it was found only on the potato tree, *Solanum verbascifolium* L.

### 448. Anthonomus Xanthocnemus picipes new variety.

The principal character used by Dietz in his key<sup>16</sup> to separate *A. xanthocnemus* from its close allies was "base of middle and hind thighs and distal half of tibiae and tarsi, honey-yellow." A weevil received from Frost, labelled "Olive Branch, Ill., IX–5-'23" is evidently a variety of *xanthocnemus* having the legs wholly piceous-brown, and the antennae, except the apical third of scape and basal joint of funicle, of the same hue. The pubescence of the sides of the under surface is also much less dense. Length 3.2 mm.

### 453. ANTHONOMUS JUNIPERINUS (Sanborn).

This little dull yellow Anthonomid has been recently found to occur in numbers, November to April, on Juniper near Dunedin, Fla., but has not been taken by me elsewhere in the State. No previous definite station record for Florida can be found.

### 480. PRIONOMERUS CALCEATUS (Say).

An apparently scarce species in Florida. At Dunedin only two specimens have been taken in fourteen years. They were se-

<sup>15</sup> Journ. N. Y. Entom. Soc., XXXIII, 1925, 97.

<sup>16</sup> Trans. Amer. Ent. Soc., XVIII, 1891, 220.

cured in March and April by sweeping herbage in low wet hammocks.

### 510. LIXUS FIMBRIOLATUS Boh.

Dr. F. H. Chittenden has recently recorded<sup>17</sup> this species from Chevy Chase and Riverdale, Md., where it was found on the paleleaved sunflower, *Helianthus strumosus* L. Its known range has hitherto been recorded as extending from northern and central Indiana west and south to Utah and Texas.

### Lixus pusio new species.

Elongate, very slender, sides subparallel. Black, shining, above thinly clothed with very short, prostrate grayish and rust-colored hairs, these in places condensed to form small scattered spots on disk and sides of elytra; tarsi piceous. Antennæ pale reddish-brown, club dusky, densely pubescent with short brownish hairs, joints 2–4 of funicle very short, subequal. Beak scarcely as long as thorax, stout, cylindrical, its punctures fine, dense, linear, rugose, the basal half with a fine but evident median carina. Thorax subconical, but slightly longer than wide at base, its sides straight and converging from base to apex; disk finely rugose with but few scattered coarse punctures and with a fine but distinct median impressed line reaching from apical third to the small but deep basal concavity. Elytra with sides continuous with those of thorax, conjointly two and a fourth times as long as wide at base; tips separately obtusely angled; discal punctures rounded, close-set. Length 7.5 mm.

Type a male from Dunedin, Fla., swept November 25 from herbage growing on the margin of a pond. Belongs to Group I, p. 332, of the "Rhynchophora" and allied to *scrobicollis* Boh., but much more slender. Differs in the sculpture of both beak and thorax, the latter with sides straight and convergent throughout, not narrowed and constricted near apex as in *scrobicollis*.

### 517. LIXUS SEXUALIS Casey.

Leng, in his "Catalogue," records this species only from Texas. Specimens are at hand from Sarasota and Dunedin, Fla., one of which was named by Casey. The Sarasota specimens are recorded in the "Rhynchophora." The one from Dunedin was

17 Bull. Brooklyn Entom. Soc., XX, 1925, 123.

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swept November 24 from tall dead grasses along the margin of a pond.

### 530. BARIS SUBÆNEA (Lec.).

This rather large brownish-bronzed Barid has not hitherto been recorded south of the District of Columbia and Arkansas. A single male was swept March 31 from the flowers of natal grass, *Tricholæna rosea* Nees, near Lake Wales, Fla.

### 533. Cosmobaris scolopacea (Germ.).

Two examples of this introduced European Barid were taken June 28, 1927, while sweeping herbage alongside the canal five miles north of Indianapolis. This is the first Indiana record and it has been taken elsewhere from west of the Alleghanies only by Wolcott at Willow Springs, Ill.

### 534. BARIS PUNCTIVENTRIS Casey.

Two specimens are at hand taken in Knox Co., Ind., September 18, which I refer to this species. It was described from Louisiana, Missouri and Indiana without definite station records.

There are in my collection from Indiana and Florida eight species of the genus *Baris* evidently differing from those treated in the "Rhynchophora." Until I have opportunity of studying the types of Maj. Casey, now in the U. S. National Museum, six of these will be held in abeyance. The other two are minute species from Royal Palm Park which differ so widely from any of Casey's descriptions that I describe them as hitherto unknown.

#### ----. Baris seminola new species.

Broadly oval. Color a uniform strongly shining reddish-brown, antennæ and legs slightly paler. Beak very stout, strongly curved, one-fifth shorter than thorax, both it and head minutely and very sparsely punctate, the latter also finely alutaceous. Thorax subquadrate, as broad as long, strongly convex, sides straight from base to apical third, thence rounded into apex; disk finely and very sparsely punctate, the punctures separated by two or three times their own diameters. Elytra conjointly oval, about twice as long as broad, widest at basal fourth, thence very broadly and feebly curved to the separately rounded tips; disk deeply striate, striæ with very fine

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elongate punctures; intervals feebly but evidently convex, with a single row of very minute punctures, these each bearing a fine, short hair, visible only when viewed from the side under a high powered lens. Pygidium and ventrals relatively evenly and sparsely punctate. Length 2 mm.

A single specimen taken at Royal Palm Park, April 8, 1925, by sweeping roadside herbage. Belongs to Group C. p. 355, of the "Rhynchophora." The brown color, small size, very stout beak and feeble sculpture of entire upper surface form a combination of characters distinctly separating it from any species there or elsewhere described.

#### ----. Baris palmensis new species.

Elongate-oval. Dark brown, strongly bronzed, antennæ and legs dark reddish-brown. Beak about two-thirds as long as thorax, moderately stout, slightly curved, subcylindrical, sides somewhat flattened, sparsely striatepunctate, distinctly constricted at basal third. Head opaque, densely alutaceous, impunctate. Thorax subconical, scarcely as broad at base as long, sides feebly and broadly curved, more strongly so toward apex, which is only about one-half as wide as base; disk, except on apical fifth, rather coarsely shallowly and evenly punctate, the punctures separated by more than their own diameters. Elytra conjointly oblong, umbones prominent, sides straight and subparallel to apical third, thence converging and rounded into apex; discal striæ fine, minutely punctate, intervals flat, each with a single row of very fine punctures, each puncture enclosing a minute seta. First and second ventrals finely, sparsely and irregularly punctate, third and fourth each with a single preapical transverse row and fifth with two transverse rows of fine punctures. Pygidium coarsely and densely punctate. Length 2.3 mm.

Described from a single specimen taken March 28 at Royal Palm Park, Fla., by beating leaves of cabbage palmetto on Long Pine Key. The small size, constriction of beak and peculiar sculpture of ventrals distinguish this from other known species of Group C of the "Rhynchophora."

## 570. PSEUDOBARIS NIGRINA (Say).

While this common species is mentioned as "ranging over the eastern United States," few definite station records from Florida are available. It is at hand from Jacksonville and is recorded by Schwarz from New Smyrna and by Casey from Key West. It is Sept., 1928]

apparently scarce in that State, as I have never taken it personally.

Two examples of this recently described<sup>18</sup> species have since been taken near Indianapolis, July 10 and 28, by sweeping in dense woodland. The types were from Crawford Co., Ind., near the Ohio River.

#### Centrinaspis (Centrinus) bracatoides new species.

Elongate-oval. Black, feebly shining; antennæ and legs reddish-piceous; above thinly clothed with small oval whitish scales which are somewhat condensed on sides of thorax. Beak rather stout, three-fourths the length of thorax, strongly curved, subcylindrical, marked with regular rows of small, rather close-set punctures. Head alutaceous, very finely sparsely and irregularly punctate. Thorax subquadrate, one-third wider than long, sides broadly curved from base to apex which is feebly tubulate; disk subtectiform with sides sloping from the crest or very narrow smooth median line, densely punctate, the punctures round, contiguous, those on sides each bearing a white scale, the middle with only a few scattered scales. Elytra conjointly oval, two-thirds longer and not wider than thorax; sides very broadly feebly curved from base to apex; disk finely deeply striate, intervals concave, the second with two rows, the others with a single row of white scales. Under surface rather finely and sparsely punctate, each puncture enclosing a white scale. Male with middle of first and second ventrals broadly shallowly concave. Length 3 mm.

Type a male, taken at Dunedin, Fla., March 26, by sweeping along the bay front. Resembles *Anacentrus* (*Limnobaris*) bracata Casey in form, size and arrangement of scales on thorax, the nude central area being distinctive. Other specimens are in the collection of H. C. Fall, Tyngsboro, Mass.

582. Centrinaspis penicella (Hbst.).

My first Florida specimen of this rather common northern species was taken at Dunedin, April 2, 1926. No published definite station record from the State can be found but Schwarz, in his manuscript notes,<sup>19</sup> mentions it from St. Augustine.

<sup>18</sup> Journ. N. Y. Ent. Soc., XXXIII, 1925, 102.

<sup>19</sup> For a brief account of these "Notes," see footnote p. 419, Can. Ent., L, 1918.

### 593. NICENTRUS LINEICOLLIS (Boh.).

This species occurs in Central Indiana in July and August on the flowers of staghorn sumac, *Rhus hirta* (L.). Framingham, Mass., August 4 (*Frost*).

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This species, omitted in the "Rhynchophora" but mentioned in my first supplement,<sup>20</sup> was present, March 19 and April 21, 1927, by hundreds on the stems and fruit heads of a sedge, *Fimbristylis castanea* (Michx.), growing in a tide-water marsh two miles north of Dunedin. With it on the same plant were numerous specimens of a small Chrysomelid, *Chætocnema robusta* Blatch. Both had been previously recorded from Hog Island, opposite Dunedin, as found on the low fleshy sea-blite, *Batis maritima* L. However, as both sedge and sea-blite grow together, the sedge is doubtless the correct host plant.

#### ----. Anacentrus (Limnobaris) vicarius new species.

Male: Narrowly oval, rather strongly convex. Black, shining, femora dark reddish-brown, tibiæ and tarsi paler. Beak chestnut-brown, one-fourth shorter than thorax, slender, subcylindrical throughout, slightly flattened in apical fourth, feebly curved, minutely and sparsely punctate; antennæ inserted at apical third, scape not reaching eye, joint 1 of funicle subclavate, twice the length of 2. Head minutely and very sparsely punctate. Thorax scarcely wider than long, sides broadly curved; disk slightly constricted near apex, coarsely punctured, the punctures almost contiguous, those on sides each bearing a conspicuous white oval scale, the middle with a rather wide smooth line extending from apex to basal fourth. Elytra conjointly oval, one-half longer than wide at base, sides slightly converging from base to apical third, thence more strongly so into the rounded apex; disk with umbones prominent, smooth, striæ fine, deep, impunctate; intervals flat, vaguely alutaceous, each with a single row of rather large punctures, these punctures near base, on sides and behind middle, each bearing a white oval scale. Under surface coarsely punctate, each puncture with a similar scale; ventrals 2 and 3 with a wide, shallow median impression. Female: Larger, more broadly oval, more robust; punctures of thorax finer, more crowded; elytral intervals 3 and 5 each with two irregular rows of scale-bearing punctures; ventrals 2 and 3 not impressed. Length-Male, 2.3 mm.; female, 3 mm.

<sup>20</sup> Journ. N. Y. Ent. Soc., XXVIII, 1920, 169.

Described from two males and one female, taken at Dunedin, Fla., March 21–April 5, by sweeping low herbage along the sides of ditches and ponds. Mr. L. L. Buchanan, at my request, kindly compared it with the types of *A. ornatus* Casey, to which it is evidently closely allied. He reported that species to have the beak much stouter and thicker at base, legs much more slender, and scales of thorax and elytra yellowish and much more abundant. He also stated that *A. ovulatus* Casey, another recently described southern species of the *bracata group*, is a smaller, narrower form with a much longer beak.

#### Sibariops (Limnobaris) pellax new species.

Elongate-oblong, subcylindrical. Black, feebly shining, antennæ and legs reddish-brown, knees darker. Beak of male as long as thorax, distinctly not strongly curved, above with an entire obtuse median carina; antennæ inserted at apical third, sides behind them densely punctate, in front almost smooth. Head and thorax minutely alutaceous, the former very finely sparsely, irregularly punctate. Thorax subcylindrical, as long as basal width, sides subparallel, feebly converging near apex, which is tubulate; disk at middle finely and rather sparsely punctate, the punctures separated by their own diameters, on sides more densely punctured, the punctures contiguous and in evident rows. Elytra not wider than and twice as long as thorax, sides straight and parallel to apical third, thence broadly rounded into apex; disk finely striate, the striæ impunctate; intervals flat, twice as wide as striæ, each with a single row of minute punctures, these each bearing a very fine prostrate grayish hair. Under surface finely and evenly punctate, each puncture enclosing a minute white scale. Side pieces of metasternum densely clothed with larger scales. Male with middle of first and second ventrals widely and deeply impressed, prosternum concave at middle, with a short obtuse spine in front of each coxa. Length 4 mm.

Type a male taken near Dunedin, Fla., April 17, 1926, while sweeping along the bay front. Belongs to *Limnobaris*, Group B, p. 397, of the "Rhynchophora." Readily distinguished by the color of its legs, the regular rows of punctures on flanks of thorax and the very fine pubescence of elytra. This was also compared by Mr. Buchanan with the types of the species of the genus *Sibariops* described by Casey. He wrote that "it does not agree with any of the numerous forms in the Casey collection." 617. DIRABIUS (LIMNOBARIS) RECTIROSTRIS (Lec.).

Weiss and West have recently given<sup>21</sup> an interesting account of the feeding habits of this weevil in New Jersey. They call it the "rush weevil," as there the adults were found in June feeding upon the flower buds and tender developing stem sheaths of the dark green bulrush, *Scirpus atrovirens* Muhl., and the woolgrass, *Scirpus cyperinus* (L.). The eggs were laid singly in cavities made by the female in the stems of the rushes. The larvæ hatch in late June or July, feed upon the pith in the center of the stem, and in September form cells in the pith six or eight inches above the ground, where they hibernate. In May they transform to pupæ and emerge as adults in early June. Only a dozen or so specimens of the beetle have been taken in Indiana, but it might be found commonly on the same rushes if a special search were made.

## ——. BARINUS ELUSUS Blatch.

Three or four examples of this prettily marked Barid are taken near Dunedin each spring by sweeping low herbage along ditches, ponds and bay front. It was described from Dunedin and has not been recorded elsewhere.

## 678. Coeliodes flavicaudis Boh.

A single specimen of this prettily marked little Ceutorhynchid was taken April 10, 1926, at Dunedin while sweeping. It has not before been known from Florida, the range as given in the Rhynchophora being "New England and Canada west and southwest to Wisconsin, Colorado and Texas."

#### Perigaster alternans new species.

Broadly oval. Dark piceous-brown, shining; antennæ, tibiæ and tarsi reddish-brown, the tibiæ with a broad fuscous ring at middle; tips of femora and apical margin of elytra also reddish-brown; upper surface thinly clothed with white scales, those on sides of thorax larger and more condensed. Beak scarcely as long as head, very stout, widened in front, thickly and finely punctate and with an obtuse median carina. Front of head flat-

<sup>21</sup> Journ. Ent. Soc. N. Y., XXXII, 1924, 196.

tened, coarsely densely punctate, the punctures of occiput in striæ. Thorax at base one-third broader than long, sides converging from base to apex; disk uneven, with but a vague trace of a dorsal channel, the middle third transversely convex, the two apical tubercles very small, acute, the posterior ones obtuse, widely separated; punctures of middle of disk small, contiguous, each enclosing a minute brassy scale, those on sides larger, each bearing a much larger oval white scale. Elytra strongly convex, widest at basal third, the sides thence feebly curved into the separately broadly rounded tips; disk with alternate intervals distinctly wider and higher, the striæ with coarse, close-set punctures. Under surface coarsely, not densely punctate, each puncture enclosing a white scale, those on mesosternal side pieces notably condensed. Hind femora annulate with white scales at apical third. Length 2.7 mm.

Type a female sifted from weed debris April 4, 1925, at Royal Palm Park, Fla. Differs from our other two species in its distinctly alternating wide and narrow intervals, and much more coarsely punctured strike of elytra, as well as in the sculpture and uneven surface of the thorax.

### 733. Conotrachelus seniculus Lec.

Mutchler and Weiss have recently issued<sup>22</sup> an interesting and valuable paper entitled "Beetles of the Genus Conotrachelus Known to Occur in New Jersey," in which they call this the "Amaranth curculio," and state that it is a root and stem feeder on both wild and cultivated species of amaranth. It is one of the most common species in both Indiana and Florida, the amaranth being a common weed in both states.

#### 750. Conotrachelus anaglypticus (Say).

Fred. E. Brooks, Entomologist Fruit Insect Investigations, U. S. Bureau of Entomology, has recently issued<sup>23</sup> a paper giving the life history of this common weevil. He calls it the "cambium curculio," as it feeds on the cambium layer of bark of various kinds of fruit and other trees, thus preventing the healing of wounds. It also lays its eggs in the skin of ripening peaches and in the bolls of cotton. A specimen from Dunedin, Fla., is only 3 mm. in length.

<sup>22</sup> Circ. No. 87, New Jersey Bureau of Statistics and Inspection, 1925.
<sup>23</sup> Journ. Agric. Research, 28, 1924, pp. 377-386, Pls. I and II.

## 755. Rhyssematus palmacollis (Say).

Taken in recent years at Miami and Royal Palm Park, Fla. Recorded from four other Florida stations in the Schwarz notes, and probably occurs throughout that State.

### 776. Paracamptus subtropicus Casey.

Two specimens of this rare subtropical species were taken at Royal Palm Park, April 12 and 15, 1927, while beating in the dense hammock. Known heretofore only from Punta Gorda, Fla., the type locality.

## 780. PSEUDOMUS INFLATUS Lec.

This has been supposed to be a strictly submaritime species, but a number of specimens have been taken in the same hammock, which is twelve miles from the nearest point on the coast. Several other forms of insect life, hitherto recorded only from the coast, have also been taken there, indicating that the isolation of this everglade key from the coast is of comparatively recent date.

### 781. PSEUDOMUS SEDENTARIUS (Say).

This scarce Florida species, recorded in the "Rhynchophora" only from Ormond and Enterprise, is at hand from Gainesville and Lakeland. The Gainesville specimen was beaten from holly on February 21.

### 788. Acalles clavatus Say.

### 790. ACALLES SYLVOSUS Blatch.

The first specimens of both these weevils from the west coast of Florida were taken recently at Dunedin, the former one on April 10, 1926, while sweeping ferns in a dense hammock; the latter on April 14, while sweeping along the bay front. Both are very common in company with *A. minimus* Blatch. in the dense hammock on Paradise Key.

----. APTEROMECHUS MICROSTICTUS Fall, Bull. Brooklyn Entom. Soc., XX, 1925, 88, 123.

This new species was described from St. Petersburg, Dunedin, Miami and Lake Poinsett, Fla. It differs from A. ferratus Say

in being a little smaller and narrower and in having intervals 3-5-7 of elytra more narrow and conspicuously elevated. The spots of whitish scales on these intervals in *ferratus* are each replaced in *microstictus* by a single white scale arising from tufts of brown ones. In my collection *microstictus* is at hand from Dunedin and Istokpoga, Fla., and was taken, February-April, by beating the swamp red bay, *Tamala pubescens* (Pursh.), in dense hammocks. A. *ferratus* is in my collection from New Jersey, southern Indiana, Knoxville, Tenn., and Royal Palm Park, Fla.

813. Cryptorhynchus tristis Lec.

Two specimens of this scarce weevil were taken in Marion Co., Ind., July 5, 1926, by beating *Crataegus*.

Differs from *T. brunneus* Blatch., the genotype and only other known species, in its larger size and darker chestnut-brown color. Beak broader, above distinctly, widely and shallowly grooved; both beak and head more closely, evenly and deeply punctate, the latter with a small fovea between the eyes. Antennæ as in *brunneus* except that the basal joint of club is almost wholly glabrous, the others densely pubescent with coarse yellow hairs. Thorax with punctures much larger, thicker and more evenly placed, separated by about their own diameters. Other characters as in *brunneus*, the peculiar sculpture of elytra being especially notable. Length 3.5 mm.

Type received from C. A. Frost and labelled "N. Brunswick, N. J., X-8."

821. DRYOPHTHORUS AMERICANUS Bedel.

A dozen examples of this peculiar Cossonid were taken December 12, 1925, from beneath loose bark of pine in my lot at Dunedin. They feigned death when uncovered and were so similar in hue to the debris on the under side of the bark that they were very difficult to find. The Sanford record in the "Rhynchophora" is the only previous definite one for the State.

846. Tomolips quercicola (Boh.).

Schwarz listed<sup>24</sup> this species from "New Smyrna and Enterprise, Fla., very rare." Dozier recorded<sup>25</sup> it as taken at light at

<sup>24</sup> Proc. Amer. Phil. Soc., XVII, 1878, 468.

<sup>25</sup> Ent. News, XXIX, 1918, 374.

Gainesville, May 9. I took it at Gainesville, February 7, from beneath bark of a dead magnolia. These are the only records for the State.

#### -----. Pseudopentarthrum fraternum new species.

Elongate, subcylindrical. Black, shining, antennæ and legs piceous, club and tarsi paler. Beak as long as head, stout, coarsely rugose-punctate. Head alutaceous, finely, sparsely and unevenly punctate and with a distinct frontal fovea. Antennæ as in *simplex*, the basal joint of funicle very large, the club scarcely differentiated from the funicle. Thorax one-third longer than wide, sides broadly rounded, disk finely alutaceous, distinctly constricted near apex, closely not finely punctate, the punctures round, occllate, separated by about one-half their own diameters. Elytra at base one-third wider than middle of thorax, sides straight and parallel to apical third, thence broadly curved into apex; striæ deeper than in *simplex*, their punctures fine and more serrate than there; intervals narrower and more convex, each with an irregular row of minute punctures. Under surface coarsely and sparsely punctate; ventrals 3–5 more finely so. Length 2.7 mm.

Type taken at Gainesville, Fla., February 21, 1927, while beating holly, farkleberry, etc. Taken also at Dunedin, February 23, by sifting weed debris. Differs from *simplex*, our only other eastern species, in the much narrower, less rounded thorax. In *simplex* the thorax is as wide as long with sides strongly rounded, and the elytra at base are not wider than its middle. In *fraternum* the striæ of elytra are deeper and intervals narrower and more convex. The strial punctures are open on their outer side, thus giving the rows a serrate appearance. The peculiar structure of the antennae in these two species easily separates them from all other eastern Rhyncolini.

### 851. Pentarthrinus atrolucens Casey.

I refer to this species several specimens taken at Dunedin in recent years in January and March by beating dead leaves of cabbage palmetto. It has been recorded only from Enterprise and Biscayne Bay on the east coast.

### 859. RHYNCHOPHORUS CRUENTATUS (Fabr.).

The great majority of the Florida specimens of this, the largest of our eastern weevils, are wholly black above and beneath and belong to the var. *zimmermanni* Fahr. In the typical *cruentatus*, only occasionally found, the thorax is dull red with a median black stripe, sides broadly margined with black, the elytra black with red spots and under surface wholly piceous. In a third as yet unnamed variety, mentioned by Horn,<sup>26</sup> the thorax is dull red with two median spots black, the elytra in great part red with scattered black spots, and the under surface, except ventrals 2–5, also red. My first example of this last variety was recently received from Royal Palm Park.

Dr. W. D. Pierce has recently shown<sup>27</sup> that the generic name *Sphenophorus* Schön., 1838, used for our corn bill bugs in the "Rhynchophora," and by other authors for the past century or longer, is an isogenotype of *Calendra* Clairv.—Schell., 1798, and will therefore have to be replaced by that name. He shows also that the generic name *Calandra* Clairv. used in the "Rhynchophora" for the grain weevils must be changed to *Sitophilus* Schön., 1838.

864. CALENDRA (SPHENOPHORUS) LATINASUS (Horn).

My second specimen of this rare weevil was taken at Dunedin, March 4, 1926, while sifting weed debris grown in muck soil near the border of a hammock. But three specimens are known, *viz.*, Horn's type, taken in Georgia and my first example from Moore Haven, Fla.

873. CALENDRA (SPHENOPHORUS) VELUTINUS (Lec.).

Up to December, 1924, only two specimens of this scarce species were known, viz., the type from an unrecorded station in Florida, the other from Louisiana in the Horn collection. In that month I was much pleased to take four while sifting the roots of a dense bunch of wire grass growing in a glade in front of the Lodge at Royal Palm Park. In April, 1925, Mr. Fall and I took three others at the same place in the same manner, and in April, 1927, a single specimen was found beneath a gunny sack

<sup>26</sup> Proc. Amer. Phil. Soc., XIII, 1873, 108.

<sup>27</sup> Proc. Ent. Soc. Wash., 1925, 113.

on Long Pine Key, about two miles from the Lodge. It differs from all our other species mainly in the smooth, dark velvety coat which covers the entire upper surface. The males are 11 mm. in length, the females, 13.5–14 mm.

## 900. SITOPHILUS (CALANDRA) RUGICOLLIS (Casey).

Mr. R. T. Cotton has recently shown<sup>29</sup> that this is the same as the *Calandra shorea* Marshall from India and *Calandra rugosicollis* Hustache from Mauritius. Casey's name has priority over both. Mr. Cotton thinks that the weevil is indigenous to India and was probably introduced in seeds into "southern Florida," the type locality of Casey's specimen.

In the second and third lines of the key on page 466 of the "Rhynchophora," "Head" should be "Thorax," and in the second line "tubercle" should be "tubercles."

<sup>28</sup> Proc. Entom. Soc. Wash., XXVI, 1924, 141.